

On Tilting modules

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Abstract

Let T be the category of tilting modules for a quantum group at a root of unity or for an algebraic group in finite characteristic or in the Bernstein-Gelfand-Gelfand category O of a semi-simple Lie algebra. Beilinson, Mircovic and Bezrukavnikov established an equivalence between the bounded homotopy category of tilting modules and the bounded derived category of all representations. We derive some results about tilting modules and modules with good filtrations from their equivalence.